

Timber is the first choice material for doors and windows for many people as it helps add character to properties of all ages and styles. It is also versatile to work with which means that custom designed doors and windows to suit your exact requirements can be manufactured. **Over the last year important changes have been made to the NZ Building code. This pages explains how this affect doors and windows.**

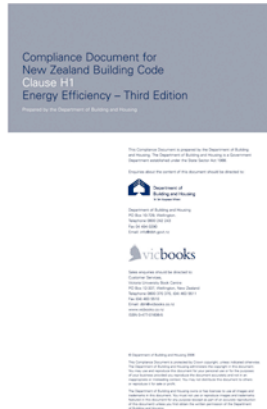
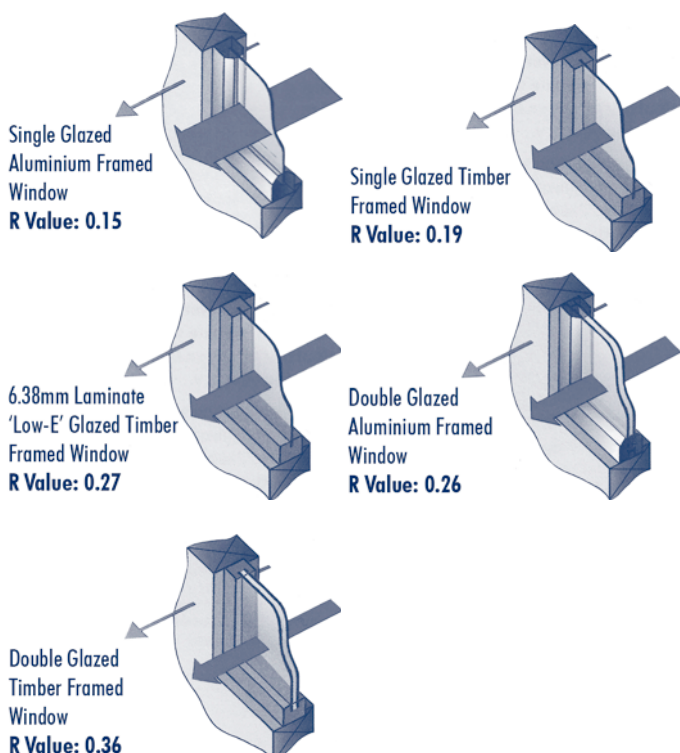
## Building Code Clause H1

New requirements for Building Code Clause H1 were announced in May 2007. H1 is the clause that spells out the minimum requirements for energy efficiency. A key part of these changes are higher insulation standards. This will have an effect on how doors and windows are specified.

On October 1st 2008, these changes will come into force for 'Zone 1' which is the area north of the Bombay Hills; i.e. Auckland, Northland and also includes the Coromandel Peninsular. The changes outlined below affect all houses and other buildings that have a floor area of less than 300m<sup>2</sup>.

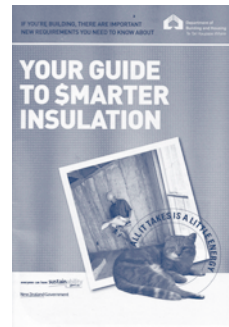
In New Zealand we use 'R Values' to measure the heat loss factor in certain parts of a building such as Walls, Roof & Windows. The Building Code indicates that vertical glazing should have an 'R Value' of not less than 0.26.

This means that for a lot of Aluminum joinery, double glazing may be necessary. However, Timber framed joinery has better insulating properties and when used with 'Low E' laminated glass, an R Value of 0.27 is achieved. Double glazed timber framed windows with standard annealed glass have an R value of 0.36. The images below show the different 'R' values with different frame, glazing combinations.



The Building Code also states that this method of using set R values for different types of glazed joinery is only valid where the glazed area of the South, East & West sides are less than or equal to 30% of the total wall area.

Where the glazed area exceeds 30% of the total wall area on these three faces, then the 'calculation or modelling method should be used.



These notes are a short summary of the changes to clause H1 of the building code. For further information a booklet published by the Department of Building & Housing is available - call us and we will send you a copy.

For more detailed information, clause H1 of the building code can be downloaded as a 'pdf' file from the Department of Building & Housing website: [www.dbh.govt.nz](http://www.dbh.govt.nz).

## Product Suitability

Single glazed timber joinery, glazed with 6.38mm laminated 'Low E' has an R value of 0.27, which exceeds the minimum R value requirement under the changes to the building code.

## Exceptions

Work which does not require a building permit such as repairs and replacement windows may not need to meet these requirements.

## Product Availability

Most joinery products that are available as single glazed units are available as double glazed units. However, double glazed joinery can be a lot heavier than single glazed units. This means that with some product types there may be certain restrictions.

B&V Timber Joinery manufacture a range of doors and windows suitable for single glazing, this is our **Trendlite** range. We also manufacture a range of doors and windows suitable for double glazing, this is our **Insulite** range. Details about both ranges are on the following page.

Made to order joinery typically has a lead time of 4 weeks from receipt of order / instruction.

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Pages 8-16 show a large selection of the joinery items that we regularly produce. For the items shown, we have developed standard specifications for single and double glazing to make it easier for you to specify which joinery items you require. In addition to the items shown, we can custom make doors and windows to suit your exact requirements.

## 'Trendlite' Single Glazed Joinery

'Trendlite' is our standard joinery range for single glazed doors & windows, accomodating glass up to 8.38mm thick.

Standard 'Trendlite' Specifications

<b>Sash:</b>	Paint Quality Cedar (this may be finger jointed), 40mm
<b>Frame:</b>	Paint Quality: Sill H3.2 Pine; Jamb, H3.1 Pine
<b>Jamb:</b>	140 x 35 min - 42 max
<b>Window Sills:</b>	Standard 42mm
<b>Door Sills:</b>	Standard Open In / Open Out
<b>Facings:</b>	< 140 x 18mm Flat H3.2
<b>Prime:</b>	1 Coat Oil Based Primer on all sides
<b>Draught Seals:</b>	Aquamac White.

Some types of joinery will have different specifications to those set out above and will come with different types of hardware. It is important therefore to follow the specification for each type of joinery item.

The following items are all available as optional extras:

<b>Stain Quality Sashes:</b>	Clear Cedar
<b>Stain Quality Frame</b>	
<b>Interior &amp; Exterior:</b>	Kwila or other type specified at the time of ordering
<b>Interior Only:</b>	Standard H3.2 Pine with a Rimu* lined
<b>Extra Lites</b>	
<b>65mm Sill</b>	
<b>Jambs wider than 140mm</b>	
<b>Glazing</b>	
*Rimu - 'Pacific Rimu' used in lieu of NZ Rimu	

## 'Insulite' Double Glazed Joinery

'Insulite' 'Trendlite' is our standard joinery range for double glazed doors & windows, accomodating double glazed units (IGUs -Insulated Glass Units) up to 21mm thick.

<b>Sash:</b>	Paint Quality Cedar (this may be finger jointed) 55mm
<b>Frame:</b>	Paint Quality: Sill H3.2 Pine; Jamb, H3.1 Pine
<b>Jamb:</b>	< 140 x 42
<b>Window Sills:</b>	Standard 42mm
<b>Door Sills:</b>	Standard Open In / Open Out
<b>Facings:</b>	< 140 x 18mm Flat H3.2
<b>Prime:</b>	1 Coat Oil Based Primer on all sides
<b>Draught Seals:</b>	Aquamac White.

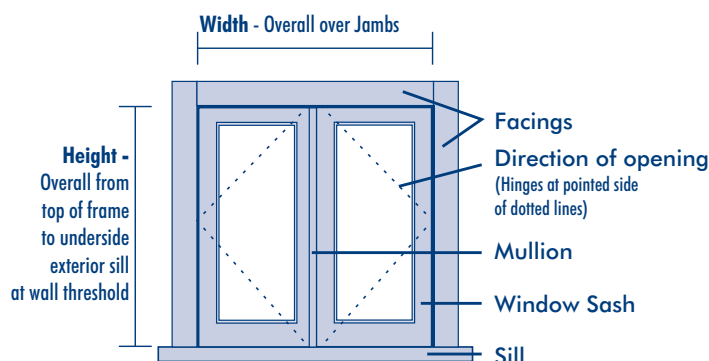
Some types of joinery will have different specifications to those set out above and will come with different types of hardware. It is important therefore to follow the specification for each type of joinery item.

The following items are all available as optional extras:

<b>Stain Quality Sashes:</b>	Clear Cedar
<b>Stain Quality Frame</b>	
<b>Interior &amp; Exterior:</b>	Kwila or other type specified at the time of ordering
<b>Interior Only:</b>	Standard H3.2 Pine with a Rimu* lined
<b>Extra Lites</b>	
<b>65mm Sill</b>	
<b>Jambs wider than 140mm</b>	
<b>Glazing</b>	
*Rimu - 'Pacific Rimu' used in lieu of NZ Rimu	

## Windows Explained

The drawing below shows the standard parts of a typical item of joinery and where measurements should be taken from.



## Standard Hardware

As a rule, the following items of hardware are used as standard:

Hardware	Joinery Type
Stainless Steel Hinges	Casement Windows, Hinged Doors
Bristol Friction Stays	Fanlight Windows
Henderson Timberfold	Bifold Windows & Doors
Henderson Coastal	Double Glazed Doors & Windows and Larger Single Glazed Doors
Polished Brass or Satin Chrome Pulleys, White Cord & Counter Weights	Double Hung Windows